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☐ 1 : P16150 . LEUKOSIALIN PRECUR...[gi:126213]

PubMed, Related Sequences

LOCUS LEUK_HUMAN 400 aa PRI 15-JUL-1999
 DEFINITION LEUKOSIALIN PRECURSOR (LEUCOCYTE SIALOGLYCOPROTEIN) (SIALOPHORIN) (CD43 ANTIGEN) (GALACTOGLYCOPROTEIN) (GALGP).
 ACCESSION P16150
 PID g126213
 VERSION P16150 GI:126213
 DBSOURCE swissprot: locus LEUK_HUMAN, accession P16150;
 class: standard.
 created: Apr 1, 1990.
 sequence updated: Apr 1, 1990.
 annotation updated: Jul 15, 1999.
 xrefs: gi: 187118, gi: 307124, gi: 338230, gi: 338231, gi: 36455, gi: 36456, gi: 180125, gi: 180126, gi: 107686, gi: 106898, gi: 106899, gi: 88098, gi: 107688
 xrefs (non-sequence databases): MIM 182160
 KEYWORDS Glycoprotein; Transmembrane; Signal; T-cell; Antigen.
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (residues 1 to 400)
 AUTHORS Pallant,A., Eskenazi,A., Mattei,M.G., Fournier,R.E., Carlsson,S.R
 TITLE Fukuda,M. and Frelinger,J.G.
 JOURNAL Characterization of cDNAs encoding human leukosialin and localization of the leukosialin gene to chromosome 16
 MEDLINE Proc. Natl. Acad. Sci. U.S.A. 86 (4), 1328-1332 (1989)
 REMARK 89145235
 REFERENCE 2 (residues 1 to 400)
 AUTHORS Shelley,C.S., Remold-O'Donnell,E., Davis,A.E. III., Bruns,G.A., Rosen,F.S., Carroll,M.C. and Whitehead,A.S.
 TITLE Molecular characterization of sialophorin (CD43), the lymphocyte surface sialoglycoprotein defective in Wiskott-Aldrich syndrome
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 86 (8), 2819-2823 (1989)
 MEDLINE 89202417
 REMARK SEQUENCE FROM N.A.
 Erratum: [[published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4689]]
 REFERENCE 3 (residues 1 to 400)
 AUTHORS Shelley,C.S., Remold-O'Donnell,E., Rosen,F.S. and Whitehead,A.S.
 TITLE Structure of the human sialophorin (CD43) gene. Identification of features atypical of genes encoding integral membrane proteins
 JOURNAL Biochem. J. 270 (3), 569-576 (1990)
 MEDLINE 91054342
 REMARK SEQUENCE FROM N.A.
 REFERENCE 4 (residues 1 to 400)
 AUTHORS Kudo,S. and Fukuda,M.
 TITLE A short, novel promoter sequence confers the expression of human leukosialin, a major sialoglycoprotein on leukocytes
 JOURNAL J. Biol. Chem. 266 (13), 8483-8489 (1991)

MEDLINE 91217090
 REMARK SEQUENCE FROM N.A.
 REFERENCE 5 (residues 1 to 400)
 AUTHORS SCHMID, K., HEDIGER, M.A., BROSSMER, R., COLLINS, J.H., HAUPT, H.,
 MARTI, T., OFFNER, G.D., SCHALLER, J., TAKAGAKI, K., WALSH, M.T.,
 SCHWICK, H.G., ROSE, F.S. and REMOLD-O'DONNELL, E.
 TITLE Amino acid sequence of human plasma galactoglycoprotein: identity
 with the extracellular region of CD43 (sialophorin)
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (2), 663-667 (1992)
 MEDLINE 92115721
 REMARK PARTIAL SEQUENCE OF 20-245, AND CARBOHYDRATE-BINDING SITES.
 COMMENT

 This SWISS-PROT entry is copyright. It is produced through a
 collaboration between the Swiss Institute of Bioinformatics and
 the EMBL outstation - the European Bioinformatics Institute.
 The original entry is available from <http://www.expasy.ch/sprot>
 and <http://www.ebi.ac.uk/sprot>

[FUNCTION] ONE OF THE MAJOR GLYCOPROTEINS OF THYMOCYTES AND T
 LYMPHOCYTES. PLAYS A ROLE IN THE PHYSICOCHEMICAL PROPERTIES OF TH
 T-CELL SURFACE AND IN LECTIN BINDING. PRESENTS CARBOHYDRATE LIGAN
 TO SELECTINS. HAS AN EXTENDED RODLIKE STRUCTURE THAT COULD PROTRU
 ABOVE THE GLYCOALYX OF THE CELL AND ALLOW MULTIPLE GLYCAN CHAINS
 TO BE ACCESSIBLE FOR BINDING.

[SUBCELLULAR LOCATION] TYPE I MEMBRANE PROTEIN.

[TISSUE SPECIFICITY] CELL SURFACE OF THYMOCYTES, T LYMPHOCYTES,
 NEUTROPHILS, PLASMA CELLS AND MYELOMAS.

[PTM] HAS A HIGH CONTENT OF SIALIC ACID AND O-LINKED CARBOHYDRATE
 STRUCTURES.

[DISEASE] CD43 EXPRESSION IS DEFECTIVE ON THE T-CELLS OF MALES WI
 THE IMMUNODEFICIENCY WISKOTT-ALDRICH SYNDROME. AFFECTED MALES ARE
 SUSCEPTIBLE TO OPPORTUNISTIC INFECTIONS AND DO NOT RESPOND TO
 POLYSACCHARIDE ANTIGENS, REFLECTING DEFECTS IN CYTOTOXIC AND HELP
 T-CELL FUNCTIONS.

[DATABASE] NAME=PROW; NOTE=CD guide CD43 entry;
 WWW='http://www.ncbi.nlm.nih.gov/prow/cd/cd43.htm'.

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ORIGIN

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